MSBIS: Multi-Step Biomedical Informatics Drug Combination Screening Approach

ChEMBL → AC Activity Scoring
(120 drugs)

FAERS → UOR Scoring
(28 drugs)

FAERS → AOR Scoring
(8 drugs)

FAERS → LR Scoring
(4 drugs)

Tardive Dyskinesia

Serotonin Expanded Bioactivity Matrix (SEBM)
Off-Target Serotonergic Drug Effects

Comparative Effectiveness of Influenza Vaccines

- Influenza-related illness is a substantial health burden
- Statins may be protective against influenza-related mortality in acutely ill patients, while other data indicates that statins are associated with reduced influenza vaccine effectiveness
- We aim to:
  - Determine the impact of statin therapy on the hazard of influenza burden
  - Determine if statin therapy reduces influenza vaccine effectiveness
  - Determine the comparative effectiveness of vaccines in statin users
- The proposed research has the potential to improve health by preventing and reducing the burden of influenza in patients on statin therapy

Impact of Remote Monitoring in Chronic Care Management

- Evidence indicates that remote patient monitoring may be associated with increased positive outcomes
- However, there is limited data regarding the use of remote patient monitoring with chronic care management
- We aim to:
  - Determine the impact of chronic care management + remote patient monitoring on clinical outcomes and medication taking behavior
  - Identify factors associated with the use of chronic care management + remote patient monitoring
- The proposed research will increase knowledge on the comparative effectiveness of these services

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